

18. (Original) The apparatus of claim 10 in which the outputs of said multiplexers are connected to an N x N waveguide grating router.

**REMARKS**

Claims 1 – 18 are pending in the application and all have been rejected under 35 USC 102(b) and 35 USC 103(a).

Claims 1, 9, and 10 have been amended and claims 8 and 12 have been canceled, without prejudice, in this amendment.

Petition for Extension of Time

Enclosed please find a Petition for Extension of Time for one month and a Form PTO-2038 to pay for such extension.

Associate Power of Attorney

Enclose please find an Associate Power of Attorney designating me as the Attorney of Record to prosecute this application.

35 USC 102(b) Claim Rejection

Claims 1, 3, 9 – 10, and 14 have been rejected under 35 USC 102(b) as being anticipated by Mendez et al (US Patent 6,025,944).

The Examiner's rejection of claim 1 states that the front drawing (Fig. 6) and Fig. 11 of Mendez discloses all of the subject matter of claims 1, 3, 9 – 10, and 14.

Independent claims 1 and 9 have been amended to incorporate the “shutters” limitations of claim 8 therein and, as amended, is not anticipated by Mendez under 35 USC 102(b). Claim 8 has been canceled, without prejudice, in this amendment. Thus, dependent claim 3, which depends from allowable claim 1 should now also be allowable under 35 USC 102(b).

Independent claim 10 has been amended to incorporate the limitations of claim 12 and, as amended, is not anticipated by Mendez under 35 USC 102(b). Claim 12 has been canceled, without prejudice, in this amendment. Thus, dependent claim 14, which depends from allowable claim 10 should now also be allowable under 35 USC 102(b).

In summary, Mendez's arrangement does not anticipate claims 1, 3, 9 – 10, and 14 under 35 USC 102(b).

#### 35 USC 103(a) Claim Rejections- Mendez

Claims 2, 11, and 13 have been rejected under 35 USC 103(a) as being unpatentable over Mendez.

Since claims 1 and 10 have been amended to include the “shutters” recited in original claims 8 and 12, respectively, Mendez alone does not suggest or make obvious amended independent claims 1 and 10 under 35 USC 103(a). (Note, the Mendez in view of Weaver rejection of claims 8 and 12 under 35 USC 103(a) will be dealt with in a later paragraph.) Thus, dependent claims 2, 11, and 13 should now be allowable under 35 USC 103(a) over Mendez for the same reasons as amended independent claims 1 and 10.

Claims 7 and 8 have also been rejected under 35 USC 103(a) as being unpatentable over Mendez.

As discussed above, since claim 1 has been amended to include the “shutters” recited in original claim 8, Mendez alone does not suggest or make obvious amended independent claim 1 under 35 USC 103(a). Thus, dependent claims 7, and 8, which depend from claim 1, should now be allowable under 35 USC 103(a) over Mendez for the same reasons as amended independent claim 1.

35 USC 103(a) Claim Rejections- Mendez in view of Okawa

Claims 4 and 15 have been rejected under 35 USC 103(a) as being unpatentable over Mendez in view of Okawa (US Patent 6,069,990).

Again, since claims 1 and 10 have been amended to include the “shutters” recited in original claims 8 and 12, respectively, Mendez alone does not suggest or make obvious amended independent claims 1 and 10 under 35 USC 103(a). Since Okawa does not disclose “shutters,” then Mendez in view of Okawa still does not suggest or make obvious amended independent claims 1 and 10 under 35 USC 103(a). Thus, dependent claims 4, and 15 should now be allowable under 35 USC 103(a) over Mendez in view of Okawa for the same reasons as amended independent claims 1 and 10, respectively.

35 USC 103(a) Claim Rejections- Mendez in view of Ueda

Claims 5-6 and 16-17 have been rejected under 35 USC 103(a) as being unpatentable over Mendez in view of Ueda (US Patent 6,163,663).

Again, since claims 1 and 10 have been amended to include the “shutters” recited in original claims 8 and 12, respectively, Mendez alone does not suggest or make obvious amended

independent claims 1 and 10 under 35 USC 103(a). Since Ueda does not disclose “shutters,” then Mendez in view of Ueda still does not suggest or make obvious amended independent claims 1 and 10 under 35 USC 103(a). Thus, dependent claims 5-6 and 16-17 should now be allowable under 35 USC 103(a) over Mendez in view of Ueda for the same reasons as amended independent claims 1 and 10, respectively.

35 USC 103(a) Claim Rejections- Mendez in view of Weaver

Claims 5-6 and 16-17 have been rejected under 35 USC 103(a) as being unpatentable over Mendez in view of Weaver (US Patent 5,524,155).

The Examiner states that (1) Mendez discloses every aspect of the claimed invention except for the plurality of shutters and that (2) Weaver discloses a demultiplexer comprising a plurality of shutters. The Examiner the states that it would have been obvious to a person skilled in the art to modify Mendez “to include the plurality of shutters for the purpose of blocking certain input signals as shown in Weaver’s reference.”

As noted previously, since claims 1, 9, and 10 have been amended to include “shutters” recited in original claims 8 and 12, respectively. Moreover, these plurality of shutters are disposed before the inputs to the multiplexers and are used in a “closed” position to block undesired crosstalk signals into the multiplexers (as described in specification at page 5, lines 6 – 11). Independent claims 1, 9, and 10 have been amended to recite this additional distinguishing aspect of the present invention, that is, that the shutters “block undesired crosstalk signals into said multiplexers.”

In contrast as noted by Examiner, Weaver discloses not our multiplexer which uses shutters, but rather a demultiplexer which uses shutters. Additionally, Weaver’s shutters are not used to “block undesired crosstalk signals into said multiplexers” as recited in our independent claims 1, 9, and 10, but rather are used to select a desired light signal from a multiplexer (see

Col. 1, lines 35-37; Col. 2, lines 23-26). Thus, Weaver's use of shutters in a multiplexer to select a desired signal would not teach, hint, or otherwise suggest to a person skilled in the art how to use shutters in front of a multiplexer to block undesired crosstalk signals into those multiplexers, as now recited in amended independent claims 1, 9, and 10. Consequently, Mendez in view of Weaver does not make obvious amended independent claims 1, 9, and 10 under 35 USC 103(a). Thus, dependent claims 2-7 and 11, 13 - 17 which depend from their respective independent claims 1 and 10, should now be allowable under 35 USC 103(a) for the same reasons as amended independent claims 1 and 10.

Summary

In summary, claims 1 – 7, 10, 11, 13 - 18 should now all be allowable over the art of record under 35 USC 102(b) and/or 103(a) and the same is respectfully requested. Claims 8 and 12 have been canceled without prejudice.

Applicants have noted the prior art made of record.

If Examiner has any questions regarding this response, applicant's attorney would welcome a call from the Examiner to discuss them.

Respectfully,

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By 

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Date:

Oct 7, 2003

Att: Associate Power of Attorney,  
Petition for Extension of Time,  
Form PTO-2038